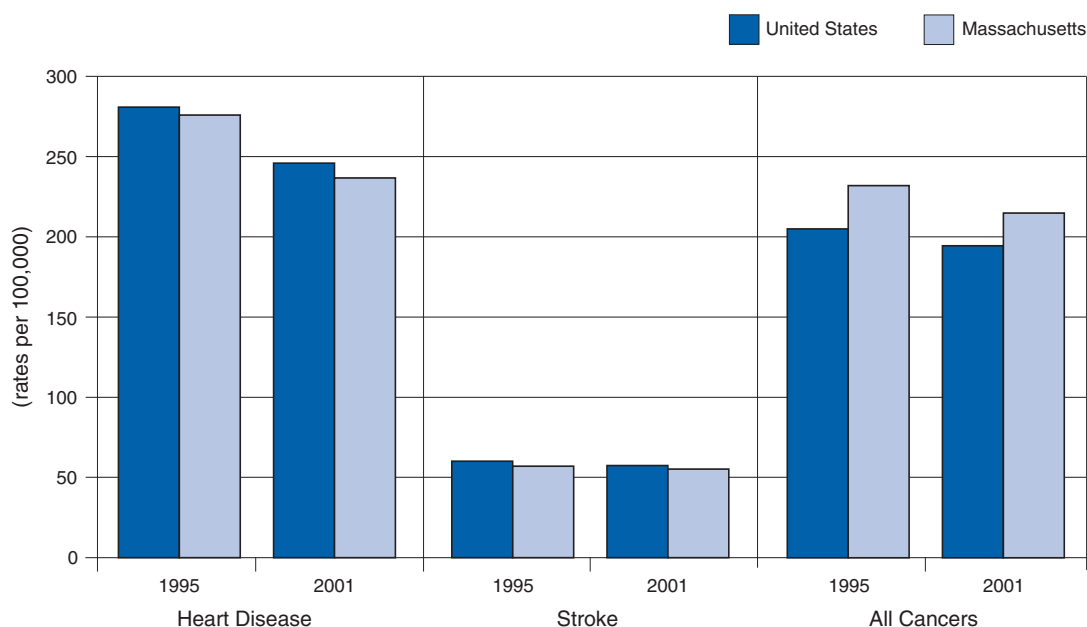


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Massachusetts, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

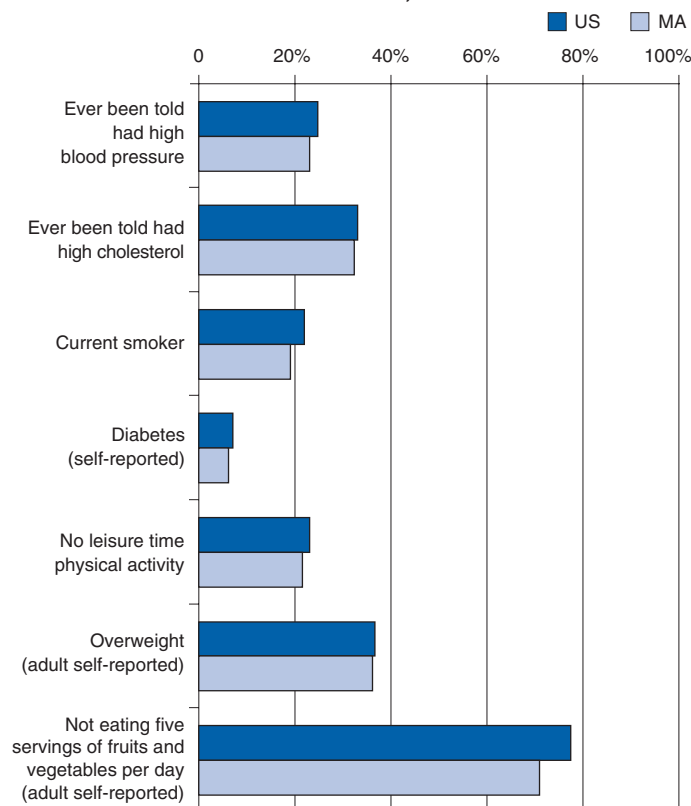
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Massachusetts, accounting for 15,144 deaths or approximately 27% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,535 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 13,620 are expected in Massachusetts. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 33,050 new cases that are likely to be diagnosed in Massachusetts.

Estimated Cancer Deaths, 2004

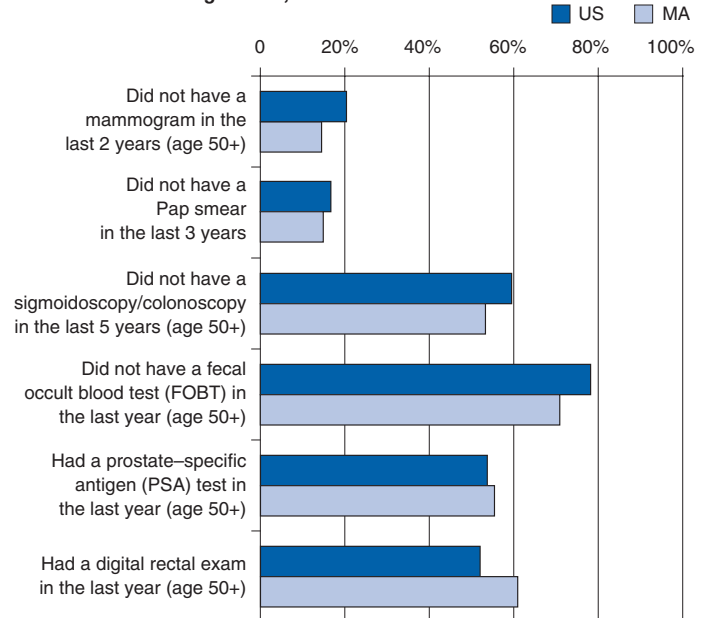
Cause of death	US	MA
All Cancers	563,700	13,620
Breast (female)	40,110	960
Colorectal	56,730	1,360
Lung and Bronchus	160,440	3,740
Prostate	29,900	740

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Massachusetts' Chronic Disease Program Accomplishments

Examples of Massachusetts' Prevention Successes

- A decrease in the rate of heart disease, stroke, and all cancers for all races occurred between 1995 and 2001. Rates for heart disease and stroke in 2001 were lower than the national average.
- A 17.3% decrease in the number of women older than age 50 who reported not having had a mammogram (from 31.8% in 1992 to 14.5% in 2002).
- A prevalence rate that was lower than the corresponding national rate for self-reported obesity (16.8% in Massachusetts versus 22.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Massachusetts in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Massachusetts, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Massachusetts BRFSS</i>	\$232,759
National Program of Cancer Registries <i>Massachusetts Cancer Registry</i>	\$1,333,485
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program <i>Massachusetts Coalition for Cardiovascular Health Stroke Task Force</i>	\$360,000
Diabetes Control Program <i>Diabetes y Usted Program Diabetes Today Coalition</i>	\$859,266
National Breast and Cervical Cancer Early Detection Program <i>Women's Health Unit</i>	\$3,687,766
National Comprehensive Cancer Control Program <i>Cancer Prevention and Control Initiative Massachusetts Comprehensive Cancer Control Plan</i>	\$717,181
WISEWOMAN <i>Massachusetts Department of Public Health</i>	\$1,250,354
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>Massachusetts Tobacco Control Program</i>	\$1,717,484
State Nutrition and Physical Activity/Obesity Prevention Program	\$1,000,000
Racial and Ethnic Approaches to Community Health (REACH 2010) <i>Boston Public Health Commission</i>	\$984,692
<i>Boston Public Health Commission (AOA)</i>	\$249,959
<i>Center for Community Health Education & Research, Inc.</i>	\$905,000
<i>Greater Lawrence Family Health Center, Inc.</i>	\$905,360
<i>Lowell Community Health Center</i>	\$905,000
Total	\$15,108,306

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Massachusetts that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Overweight and Obesity

One of every two Massachusetts adults is either overweight or obese. Although Massachusetts has the 4th lowest percentage of overweight adults in the United States, the percentage of adults who are overweight or obese increased from 40.1% in 1990 to 53.0% in 2003. According to CDC's 2003 Behavioral Risk Factor Surveillance System data, the percentage of overweight or obese men in the state was higher than the percentage for overweight women (63.1% for men versus 43.2% for women). The percentage of obese adults also increases with age until age 64, then decreases.

Several factors cause obesity and overweight: food and nutrient consumption patterns, a lack of physical activity, and socioeconomic factors. According to 2003 data from the BRFSS, adults with less than a high school education had an obesity rate that was 2 times greater (26.9%) than the obesity rate for adults with a college degree (12.1%). Findings were similar among Massachusetts residents with different income levels; 22.1% of adults with annual incomes of \$25,000 or less were obese, while only 14.2% of adults with annual incomes of \$50,000 or greater were obese.

Overweight and obesity are also problems for infants and children in Massachusetts. More than one third of children ages 2 to 5 are either at risk of being overweight or are already overweight. The prevalence rate of risk for overweight among children ages 2 and older in Massachusetts is 33%, compared with the national prevalence rate of 28%. The prevalence of risk for overweight is highest among Hispanic children; it is lowest among Asian/Pacific Islander children.

Overweight and obesity are also risk factors for diabetes. The prevalence rate of diabetes in Massachusetts in 2003 was lower than the national rate (6.2% versus 7.1%); however, the diabetes death rate in Massachusetts in 2001 was higher than the national rate (25.7 per 100,000, compared with 25.2 per 100,000).

As part of the Healthy People 2010 Initiative, Massachusetts has established objectives for reducing the prevalence of overweight and obesity. These objectives include reducing the proportion of children and adolescents who are overweight (from 10% to 5%), and reducing the proportion of adults who are obese (from 17% to 15%).

*Text adapted from Healthy People 2010—
Leading Health Indicators for Massachusetts.*

Disparities in Health

African Americans and Hispanics comprise approximately 25% of the U.S. population. In Massachusetts, Hispanics make up approximately 7% of the state's population; African Americans make up approximately 5%. African Americans and Hispanics in the United States experience disproportionate socioeconomic hardships and health disparities. African Americans have higher stroke death rates than other population groups and a higher prevalence of the risk factors for heart disease. Hispanics, who are almost twice as likely to die from diabetes as non-Hispanic whites, also have higher rates of high blood pressure and obesity than their white counterparts.

In Massachusetts, the leading cause of death is heart disease. The state's African Americans and Hispanics are at the greatest risk for health problems related to overweight and obesity, which are risk factors for heart disease. Data from CDC's 2003 Behavioral Risk Factor Surveillance System indicate that rates of obesity in Massachusetts are highest among African Americans and Hispanics (27.6% and 22.0%, respectively). Of all racial and ethnic groups, Hispanics are the least likely to participate in regular physical activity (42.3%, in comparison with the 28.3% of African Americans and 19.1% of whites).

As mentioned previously, several socioeconomic factors such as household income and education appear to be directly related to obesity and overweight. In Massachusetts, Hispanics and African Americans have the state's lowest per capita incomes; in 2003, more than 50% of Hispanics and 40% of African Americans had an annual income of less than \$25,000. The Hispanic population in Massachusetts has the highest percentage of adults with less than a high school education (37.7%), in comparison with African Americans (14.8%) and whites (5.6%).

Other Disparities

- **Diabetes:** In Massachusetts, the percentage of Hispanic adults who report being told by a doctor that they have diabetes is 8.7%, (a rate higher than that of any other racial or ethnic group), followed by African American adults (7.1%) and whites (6.0%). However, these rates decrease with increasing education and annual income.
- **Cholesterol Screening:** Whites in Massachusetts are the most likely to have had their blood cholesterol checked (83.5%), followed by African Americans (75.5%); Hispanics are the least likely to have had their blood cholesterol checked (69.3%).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
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